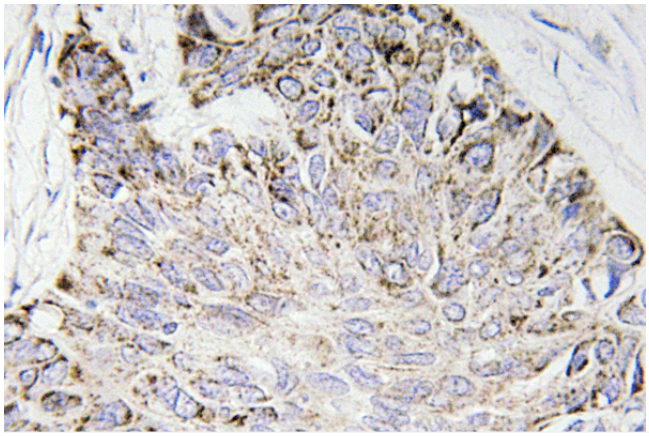
Caspase-4 Polyclonal Antibody

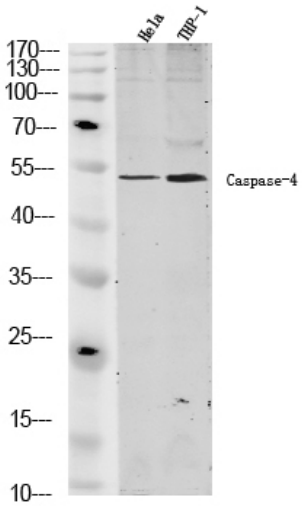
Catalog No	BYab-00346
Isotype	IgG
Reactivity	Human
Applications	WB;IHC;IF;ELISA
Gene Name	CASP4
Protein Name	Caspase4
Immunogen	The antiserum was produced against synthesized peptide derived from human Caspase-4. AA range:75-124
Specificity	Caspase-4 Polyclonal Antibody detects endogenous levels of Caspase-4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CASP4; ICH2; Caspase-4; CASP-4; ICE(rel)-II; Protease ICH-2; Protease TX
Observed Band	45kD
Cell Pathway	Cytoplasm, cytosol . Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Mitochondrion . Inflammasome . Secreted . Predominantly localizes to the endoplasmic reticulum (ER). Association with the ER membrane requires TMEM214 (PubMed:15123740). Released in the extracellular milieu by keratinocytes following UVB irradiation (PubMed:22246630). .
Tissue Specificity	Widely expressed, including in keratinocytes and colonic and small intestinal epithelial cells (at protein level). Not detected in brain.
Function	catalytic activity:Strict requirement for Asp at the P1 position. It has a preferred cleavage sequence of Tyr-Val-Ala-Asp-|- but also cleaves at Asp-Glu-Val-Asp-|-.,function:Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves caspase-1.,PTM:The two subunits are derived from the precursor sequence by an autocatalytic mechanism or by cleavage by Caspase-8.,similarity:Belongs to the peptidase C14A family.,similarity:Contains 1 CARD domain.,subunit:Heterotetramer that consists

	of two anti-parallel arranged heterodimers, each one formed by a small and a large subunit.,tissue specificity:Widely expressed, with highest levels in spleen and lung. Moderate expression in heart and liver, low expression in skeletal muscle, kidney and testis. Not found in the brain.,
Background	This gene encodes a protein that is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes composed of a prodomain and a large and small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This caspase is able to cleave and activate its own precursor protein, as well as caspase 1 precursor. When overexpressed, this gene induces cell apoptosis. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of Caspase-4 antibody in paraffin-embedded human lung carcinoma tissue.



Western blot analysis of lysates from 1) Hela ,2)THP-1, (Green) primary antibody was diluted at 1:1000, 4°over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour.